

## The Perceived Importance Weight of Product Information Cues in E-Shopping

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## 온라인 쇼핑에서 소비자가 지각하는 제품 정보 중요성의 비중

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### Abstract

Consumer may perceive needs of certain product information online rather than the number of pieces of information available for decision making. In addition, consumers may seek information that is more relevant to apparel category. Moreover, involved consumers intensify information seeking and seek certain information. The purpose of this study is to identify the perceived importance weight of each information cue when shopping apparel via the Internet, to investigate the differences of the perceived importance weight of product information cues in product category, and to examine the relationship between apparel involvement and the perceived importance weight of product information cues. This study employed a single-factor within-subjects design experiment that simulated online purchase situation for two product types, Jeans and a Shirt. A total of 125 college students participated in this study. Results indicated that selected information such size available, price, style, color description, item measurement, stock available, and item quality (in sequence) can be considered as global cues to judge product quality and influence purchase decision regardless of product category. The significant multivariate effects for product category on the perceived importance weight of product information cues were found. Personalization, fiber content, and fabric structure were product specific information cues. Consumers' product involvement significantly influenced the perception of information weight. Therefore, product information can be personalized based on consumer involvement

**Key words:** Product information, Importance weight, Clothing involvement, Product category; 제품정보, 중요성의 비중, 의복관여, 제품범주

### I. Introduction

E-commerce sales at domestic online retailers totaled 53 billion dollars in 2001("U. S. online consumer sales surge to \$53 billion", 2002). For the third quarter of 2001, U. S. retail-e-commerce sales for

non-travel goods were \$7.472 billion with an increase of 8.3 percent over the third quarter of 2000("U. S. Census Bureau", 2001). The average weekend day brings \$97 million in sales, but average weekday sales were 60% greater at \$155 million, due to increased shopping activity in the workplace. In addition, average monthly dollars spent per buyer by location in 2001 were \$229 at work, \$165 at home, and

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\$146 at school("U. S. online consumer sales surge to \$53 billion", 2002). In particular, U. S. apparel sales online during the past few years have doubled from 2.9 billion dollars in 1999 to 5.9 billion dollars in 2000("Retail apparel sales statistics and trends", 2002).

Among Internet users, sixty percent reported shopping online for clothing. Approximately 40 percent of Internet apparel purchasers expected to repeat their clothing purchases in the near future("Online apparel shopping gaining in popularity", 2000). Apparel was the third largest e-commerce category with 10% of market share following travel(e.g., airline tickets) and computer related goods(e.g., software, hardware) in Internet sales in 2001("U. S. online consumer sales surge to \$53 billion", 2002). This illustrates the importance of apparel shopping from the Internet.

Information available has been a prime concern for e-shopping. It is still in controversy whether the amount of information influences purchase decisions online. A recent research(Park & Stoel, 2005) found that information quantity did not influence perceived risk and purchase intention online. Due to the limited tactile experience(e.g., touching, trying on), information that can substitute fitting activities may be sought by e-shoppers. Consumers also may perceive needs of certain product information online rather than the number of pieces of information available for decision making. According to Then and DeLong (1999), online browsers are interested in verbal/text information about fiber content and laundering instructions, but not interested in country-of-origin. McCorkle(1990) found that product sensory information such as fabric hand, garment fit, color, or quality were main criteria for apparel shopping at home.

Because apparel may be a risky product to buy via the Internet due to the inability to examine and try on apparel items and the uncertainty of apparel quality, consumers may gather and process certain information that is specific to apparel category. Cox and Rich (1964) found that consumers are concerned about information available such as size, color, and fit for risky apparel items including skirts, sweaters, and girdles. Moreover, involved consumers intensify infor-

mation seeking(Flynn & Goldsmith, 1993). The purpose of this study is a) to identify the perceived importance weight of each information cue when shopping apparel via the Internet, b) to investigate the differences of the perceived importance weight of product information cues in product category, and c) to examine the effect of apparel involvement on perceived importance weight of product information cues.

## II. Conceptual Background

### 1. Information Seeking

Consumers search for product information to examine and compare with alternatives in their decision making process(e.g., Davis, 1987; Engel et al., 1978). Information seeking and handling involves three phases: information acquisition, processing, and transmission. Information that is acquired is intuitively evaluated and processed in terms of what information not to use, what information to store in memory, and what to forget(Cox 1967; Sheth & Venkatesan 1968). In this process, shoppers tend to associate a set of information cues (e.g., price, country of origin, care instructions) with product quality and use them to make a purchase decision.

Product information that facilitates consumer decision-making varies among the several retail formats currently existing in the market. Griffin and O'Neal (1992) found that when shopping for clothing in the traditional retail context, information on fiber content, fabric hand, and price was significantly considered for judging product quality. When catalogs shopping, consumers considered such information as price, color, fiber content, care instructions, country of origin, and identification of manufacturer as valuable indicators for judging product quality(Cox, 1967). On the Internet, sensory and experiential product information such as fabric construction and fabric hand may be important for judging product quality (Park & Stoel, 2002).

In-home shopping is inherently risky due to the nature of consumer's inability to inspect or try the garment(Japer & Ouellette, 1994; Kwon et al., 1991).

A number of past empirical studies (e.g., Park & Stoel, 2005; Park et al., 2005) emphasized consumer information search pattern in in-home shopping and assessed perceived risk and purchase intention to predict the effect of information availability on Internet sales. Due to unpredictable consequences and uncertainties about product quality, absence or lack of product information may often result in greater amount of perceived risk (Simpson & Lakner, 1993). Size, color and fit were found to be important information cues that decrease perceived risk of apparel purchases (Cox & Rich, 1964). When sensory experience is not allowed, color, fabric, style, fashionability, and fit also are important to shoppers. Therefore, in the limited experiential shopping condition such as the Internet, product information is an important attribute when making purchase decisions for apparel and textile products (e.g., Smallwood & Wiener, 1987). Because touching and feeling are the important decisive factors for purchasing apparel, absence of such experiences need to be compensated with information available online.

## 2. Information Quantity vs. Quality

Although the amount of perceived information is known to influence perceived risk in home shopping (Kim & Lennon, 2000), the amount of information available on a website may not be an important determinant for online apparel purchase decisions. Park and Stoel (2005) found that information quantity did not influence perceived risk and purchase intention online. Shoppers may not be able to handle a large quantity of information. Excessive information may not be efficient to be processed and thus, may be simply dropped. Rather, consumers may be able to encode information, facilitate thinking, and make an accurate purchase decision when information is clearly presented using easily understood language (Entwistle et al., 1996). Consumers look for economic ways to reduce cognitive effort and save the cost of shopping time through the Internet. Quality of information content can enhance efficiency of cognitive information processing. Therefore, information quality such as complexity, ease, and accessibility of

information content may be more important for Internet shoppers than information quantity. When consumers find product information confusing or inaccurate, they tend to misinterpret the information and feel difficulty in making judgment about the product (Davies, 2001). Previous research (e.g., Then & Delong, 1999) has shown that rich, descriptive information results in greater purchase activity. This type of information may reduce the amount of perceived risk associated with Internet shopping and help judging product quality and purchase decision.

## 3. Selective Information Cues

Individuals tend to prioritize some aspects of information based on capacity limit of the information processing system and process only selected information (Van der Heijden, 1992). It is evident in purchase situations. According to Martin (1971), price, color, fiber content, garment care, and brand name were the most frequently sought information. Fiber content and finish stated in the garment labels help consumers identify product composition (Hatch & Roberts, 1985; Wheatley & Chiu, 1977). Size information guides consumers in locating garments that would fit. Care instructions (e.g., dry-cleaning only, machine wash, hand wash) also are important for purchasers of ready-to-wear apparel and fabrics (Hatch & Lane, 1980). In the in-home shopping context, when garments, labels, and hangtags cannot be examined directly, shoppers rely heavily on certain information stated or visual product images available (Szymanski & Hise, 2000). Internet shoppers on apparel websites were most interested in written information about fiber content and laundering instructions, but not interested in country-of-origin (Then & Delong, 1999). However, although sensory and experiential information including style, fashionability, fabric construction, coordination, and texture/fabric hand is more valued for Internet shoppers, Park and Stoel (2002) found that such information was available only on half or fewer of the apparel websites. The sparse amount of this information provided online may be insufficient to generate purchase of new, fashionable, and/or seasonal garments. In addition, on-screen

information revealing quantity of product available may be important when shoppers are purchasing clothing for immediate usage (Park & Kim, in press). A product out of stock or on backorder can delay delivery to the consumer and in turn, increase uncertainty of consumption time. With stock availability or quantity information prior to purchase, consumers can make decisions based on expected delivery time.

Information needs or selection varies by product category. Some apparel items, such as skirts, sweaters, and girdles that are perceived more risky than other apparel categories require more experiential information (Cox & Rich 1964). Davis (1987) found that style and price were selected as the two most important pieces of information for a blouse purchase, followed by fabric, store, and fit. Based on the literature, it is reasonable to expect that information may be selected based on perceived importance when shopping from the Internet. In addition, perceived importance of information cues vary among apparel products.

#### **4. Apparel Involvement and Information Seeking Pattern**

Involvement, defined as the perceived relevance of products to individuals based on inherent needs, values and interests, is a central motivation factor that shapes the purchase decision-making process and influences consumer buying behavior (Fairhurst et al., 1989). Involved consumers exhibit feelings of interest, pleasure, and enthusiasm toward relevant product categories (Goldsmith & Emmert, 1991).

Apparel and fashion products have frequently been recognized as a product category likely to induce high involvement. Some types of apparel, such as socks, may yield lower levels of involvement for many consumers, particularly if the items are low in price and repeat purchase is frequent. However, due to the symbolic nature of much outerwear that serves as a marker of the wearer's identity, involvement in apparel is likely to be high for many consumers (Hirschman & Holbrook, 1982). In addition, situations surrounding apparel purchase decisions and

intended use of apparel influence a consumer's decision.

Product involvement has often been studied in relation to intensity of information seeking (e.g., Jin & Koh, 1999; Richins & Bloch, 1986) and types of information sought (e.g., Corey 1971, Richins et al., 1992). Therefore, involved consumers spend more time and energy in product search (e.g., Engel & Blackwell, 1982). Highly involved consumers seek more product information because they want to augment product knowledge (Petty et al., 1983). Reasons of why involved consumers seek more product knowledge are often contributed to the level of risks perceived (Dholakia, 2001). Since involved consumers perceive more risks in shopping, purchasing and consuming, they tend to look for more knowledge about the product for better or less risky decision making (Chaudhuri, 2000). Some recent researches report that involved consumers not only seek information for satisfactory decision making but also feel pleasure when they seek information about the product (e.g., Mathwick & Rigdon, 2004).

Based on the literature that demonstrated a strong relationship between apparel involvement and information seeking pattern, it is likely that apparel-involved consumers who shop apparel online may seek product information that are different from consumers who are less involved with apparel.

### **III. Experimental Procedure**

#### **1. Sample**

A total of 125 female undergraduate students in the Midwestern University in the U.S. participated in this study for extra course credit. This group is especially likely to be potential Internet shoppers. According to Lee and Johnson (2002), about thirty-two percent of Internet apparel shoppers were under 30. These young adult consumers are likely to be a great potential for e-retailing whose purchases are frequently made on the Internet (Hogg et al., 1998; Silverman, 2000). Therefore, it is reasonable to use student subjects who are between the ages of 18 and 30 in this study to investigate the information need for pur-

chasing apparel from e-shopping channels.

## 2. Stimuli Selection

One pair of jeans and a shirt were selected for stimuli from the pretest. The pretest was conducted to find the most typical garment style for each stimulus (a pair of jeans and a shirt) that may reflect participants' taste and preferences and also, be frequently worn by participants. Appropriate selection for garment stimuli is critical because various garment styles could affect their responses (e.g., the amount of information need). Since the independent variables of interest in this research were product category and consumer involvement, we intended to minimize variance due to style. In this study, real garments from the existing apparel websites were used to increase reality. Ten product images (five images for jeans and five images for shirts) with various garment styles selected from the existing apparel websites who were targeting younger-aged consumer groups (e.g., college students) were shown for rating the typicality of the garment style (e.g., the garment in the image is similar to what I wear) using five-point unipolar scales. All chosen product images for the pretest were carefully reworked in order not to reveal any identities associated with the brand or the retailer. In addition, product presentation technique (e.g., human model worn the garment) was consistent. Finally, based on the pretest with ten participants, one pair of jeans and a shirt with highest typicality of what college students wear were chosen for stimuli.

## 3. Stimuli Manipulation

This study employed a simple-factor within-subjects design: Product category (Jeans vs. Shirts). Two single Web pages were created to closely mimic the design of "true" websites. Visual product image was consistent across two websites. Because visual product information on the websites is not a focus of this study, presentation technique and image size possibly may function as a confounding variable which may influence the perceptions on the types of information needs. The thirteen pieces of text information associ-

ated with the garment included fiber content, fabric construction, color, price, item care (e.g., machine wash), item quality (e.g., seam type, hem depth), sizing availability, item measurement, country-of-origin (e.g., imported), texture/fabric hand, and quantities available (e.g., in stock). The product-related text information provided was typical for online apparel retailers (Park & Stoel, 2002). Finally, any information related to the brand or retailer was not disclosed in order to avoid the familiarity effect which possibly can influence the needs for the types of information.

## 4. Procedure

A laboratory setting was established with computers. First, participants were asked to read general instructions about the experiment and answer questions including shopping experience from the Internet and apparel involvement. Then, they were asked to read a descriptive scenario for stimulating needs of purchasing a new jeans and shirts and browse two mock websites that each displayed one pair of pants or one shirt. Manipulation check was completed with a question for garment style.

## 5. Instrument and Data Analysis

The thirteen product information cues that were commonly found on the apparel e-shopping sites (Park & Stoel, 2002) were selected for this study. The information cues are as follows: Fiber content (e.g., 100% cotton, 70% cotton), fabric structure (e.g., woven, knitted), price (e.g., \$19.99), color description (e.g., white, black), style (e.g., boot cut, straight), item quality (e.g., 21 inches inseam, seam type, hem depth), item care (cleaning instruction, pressing), coordination (how the item should be worn/used), item measurement (e.g., size XL measures 46" in the chest), size availability (e.g., available in S, M, L, XL), personalization availability (e.g., hem and cuff), country of origin (e.g., imported, domestic), and on-screen information on quantities available (e.g., in-stock, out-of-stock, on order). Participants were asked to rank thirteen product information cues from the most important (R 1) to the least important (R 13) when shopping

a pair of pants from the Internet. The same set of information cues were assessed when purchasing a shirts. Then, using a five-point Likert scale(1 – not very important, 5 – very important), the perceived importance weight for each product cue was assessed twice for two product categories.

A fifteen-item apparel involvement scale, developed by Lee(2000), was assessed using a five point Likert-type scale from 1(Strongly disagree) to 5 (Strongly agree). This scale measured enduring involvement in apparel product exclusively based on three highly correlated sub-dimensions of apparel involvement- as interest, sign, and pleasure – that reflects the characteristics of apparel products. Reported reliability of the original scale was .94(Lee, 2000).

Participants were asked about their shopping experience from the Internet. Two questions, “Have you ever purchased products from the Internet?”(yes or no) and “Have you ever purchased clothing from the Internet?”(yes or no) were elicited. Demographic information such as age, sex, ethnicity, and major also was assessed from the participants.

Data were analyzed using SPSS version 12. Descriptive statistics were used to see the information rank; repeated multivariate analysis variance were used to see the effect of product category on the perceived importance weight; stepwise multiple regres-

sion were used to explore the relationships between apparel involvement and the perceived importance weight of thirteen information cues for jeans and shirts.

## IV. Results

### 1. Preliminary Analysis

**Participant profile.** All participants were female college students. The mean age of participants ( $N=125$ ) was about 20 years, with a range of 18 to 38 years. Majority of participants were Caucasians (82%) and single(98%). About 85 percent of participants had an experience with e-shopping. Among participants who had a past e-shopping experience, about 63 percent had purchased apparel from the Internet.

**Information rank.** Participants were asked to rank all 13 information cues included in the study. Using descriptive analyses, for purchasing a pair of jeans from the Internet, price(rank 1) was ranked first, followed by style description(rank 2), stock available (rank 3), size available(rank 4), and color description (rank 5), respectively. For purchasing a shirt from the Internet, color description(rank 1) was ranked first, followed by price(rank 2), style description(rank 3), size available(rank 4), and fiber content(rank 5) as the important cues(Table 1).

**Table 1. Information rank and importance weight**

Jeans			Shirts		
Information cues	Rank <sup>a</sup>	Importance <sup>b</sup> weight	Information cues	Rank	Importance weight
Price	R1	4.53	Color description	R1	4.47
Style	R2	4.66	Price	R2	4.66
Stock available	R3	4.07	Style	R3	4.38
Size available	R4	4.66	Size available	R4	4.80
Color description	R5	4.53	Fiber content	R5	3.81
Item measurement	R6	4.38	Item measurement	R6	4.06
Item quality	R7	4.00	Fabric structure	R7	3.70
Fiber content	R8	3.55	Item quality	R8	3.87
Item care	R9	3.74	Item care	R9	3.77
Fabric structure	R10	3.36	Stock available	R10	4.03
Coordination	R11	3.25	Coordination	R11	3.19
Personalization	R12	3.52	Personalization	R12	3.14
Country-of-origin	R13	2.33	Country-of-origin	R13	2.32

Note: <sup>a</sup>measured by rank scale; <sup>b</sup>measured by 5-point Likert type scale

## 2. Perceived Importance Weight

Participants' perceived importance weight was examined using descriptive analyses (Table 1). Seven information cues including size available ( $M=4.66$ ), price ( $M=4.53$ ), style ( $M=4.66$ ), color description ( $M=4.53$ ), item measurement ( $M=4.38$ ), stock available ( $M=4.07$ ), and item quality ( $M=4.00$ ) in sequence were perceived to be important when shopping a pair of jeans from the Internet. For shopping a shirt from the Internet, five information including price ( $M=4.66$ ), color description ( $M=4.47$ ), size available ( $M=4.80$ ), style ( $M=4.38$ ), item measurement ( $M=4.06$ ), and stock available ( $M=4.03$ ) in sequence were perceived as important cues. Country-of-origin was the least important information cue for both a pair of jeans and a shirt.

## 3. The Effect of Product Category on the Perceived Importance Weight

Since a participant responded to question items for both jeans and shirts, we estimated a repeated measures multivariate analysis of variance model with one within subjects factor (Product category: Jeans and shirt). The significant multivariate effect for product category on the perceived importance weight of product information cues were found,  $F(13,112)=6.10$ ,  $p<.001$ . Then, repeated measure univariate analyses of variance were calculated to determine which dependent variables contribute the significant

multivariate effect. The results revealed the significant main effects for product category on fiber content ( $F(1, 124)=19.47$ ,  $p<.001$ ), fabric structure ( $F(1, 124)=12.42$ ,  $p<.001$ ), price ( $F(1, 124)=7.41$ ,  $p<.01$ ), style ( $F(1, 124)=11.16$ ,  $p<.001$ ), measurement ( $F(1, 124)=20.56$ ,  $p<.001$ ), and personalization ( $F(1, 124)=12.61$ ,  $p<.01$ ). The perceived importance weights of fiber content, fabric structure, and price information cues were greater for a shirt than a pair of jeans. However, information cues for style, measurement, and personalization were perceived more important for purchasing a pair of jeans, compared to a shirt (Table 2). Importance weight for other information cues such as stock available, size available, color description, item quantity, item care, coordination, and country-of-origin did not show significant differences across product category.

## 4. Effect of Apparel Involvement on Perceived Importance Weight

In order to examine construct validity for apparel involvement factor analysis was accessed (Cronbach & Meehl, 1955). Exploratory factor analyses were conducted to determine whether multiple indicators for each variable comprised one factor dimension. Factor loadings above .55 (Nunnally, 1967) and not higher than .30 on other factors (Kline, 1998), were considered evidence for construct validity. Three factors were generated for apparel involvement and the first factor that explains the most variance ( $R^2=55.84$ ) was used. The reliability for apparel involvement was .96, indicating good reliability of the measure.

Stepwise multiple regression analysis was used to assess the relationship of apparel involvement to the perceived importance weights of the thirteen information cues for a pair of jeans. Results of the analysis revealed that the perceived importance weight for four information cues (fiber content, fabric structure, color description, and price) accounted for 48.9% of the explained variance in apparel involvement,  $F(4, 120)=9.42$ ,  $p<.001$  (Table 4). People who had greater apparel involvement, they were likely to perceive greater importance on fiber content ( $\beta=.49$ ,  $p<.001$ )

**Table 2. The effect of product category on the perceived importance weight: Repeated Multivariate Analysis of Variance**

Variable	Jean (Mean)	Shirt (Mean)	df	F
Fiber content	3.55	3.81	(1, 124)	19.47***
Fabric structure	3.36	3.70	(1, 124)	12.42**
Price	4.53	4.66	(1, 124)	7.41**
Style	4.66	4.38	(1, 124)	11.16***
Item Measurement	4.38	4.06	(1, 124)	20.56***
Personalization	3.52	3.14	(1, 124)	12.61*

\*\* $p<.01$ , \*\*\* $p<.001$

Note: Only significant differences were shown in the Table. Information weight for all other information cues did not show significant differences across product type.

**Table 3. Stepwise multiple regression analysis for relationships between apparel involvement and the perceived importance weight of thirteen information cues for jeans**

<b>Model</b>					
Model	SS	df	MS	F	R <sup>2</sup>
1 Regression	732.15	1	732.15	8.88**	.26
Residual	10140.94	123	82.45		
Total	10873.09	124			
2 Regression	1274.50	2	637.25	8.10***	.34
Residual	9598.59	122	78.68		
Total	10873.09	124			
3 Regression	1602.14	3	534.05	6.97***	.38
Residual	9270.95	121	76.62		
Total	10873.09	124			
4 Regression	2598.52	4	649.63	9.42***	.49
Residual	8274.57	120	68.96		
Total	10873.09	124			

**(Table 3. continued) Coefficients**

Model	Independent variables	$\beta$	b	t
1	Fiber content	.26	2.44	2.98**
2	Fiber content	.46	4.34	4.02***
	Fabric structure	-.30	-3.07	-2.63*
3	Fiber content	.41	3.86	3.54**
	Fabric structure	-.29	-2.90	-2.51*
	Color description	.18	2.66	2.07*
4	Fiber content	.45	4.22	4.06***
	Fabric structure	-.24	-2.48	-2.25*
	Color description	.44	6.61	4.13***
	Price	-.42	-5.48	-3.80***

$\beta$ : Standardized regression coefficient, b: Unstandardized regression coefficient.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

and color( $\beta = .44$ ,  $p < .001$ ) information cues and less importance on fabric structure( $\beta = -.24$ ,  $p < .05$ ) and price( $\beta = -.42$ ,  $p < .001$ ) information cues for purchasing a pair of jeans (Table 3).

Stepwise multiple regression analysis was used to assess the relationship of apparel involvement to the perceived importance weights of the thirteen information cues for a shirt. Results of the analysis revealed that the perceived importance weight for two information cues (stock available, size available) accounted for 35.1% of the explained variance in apparel involvement,  $F(2, 122) = 8.59$ ,  $p < .001$  (Table 4). People who had greater apparel involvement, they were likely to perceive greater importance on stock available( $\beta = .30$ ,  $p < .001$ ) information cue and less

**Table 4. Stepwise multiple regression analysis for relationships between apparel involvement and the perceived importance weight of thirteen information cues for a shirt**

<b>Model</b>					
Model	SS	df	MS	F	R <sup>2</sup>
1 Regression	1022.29	1	1022.29	12.77***	.30
Residual	9850.79	123	80.09		
Total	10873.09	124			
2 Regression	1341.53	2	670.77	8.59***	.35
Residual	9531.55	122	78.13		
Total	10873.09	124			

**(Table 4. continued) Coefficients**

Model	Independent variables	$\beta$	b	t
1	Stock available	.31	3.05	3.57**
2	Stock available	.30	3.03	3.59***
	Size available	-.17	-.46	-2.02*

$\beta$ : Standardized regression coefficient, b: Unstandardized regression coefficient.

\* $p < .05$ , \*\* $p < .01$ , \*\*\* $p < .001$

importance on size available( $\beta = -.17$ ,  $p < .05$ ) and price( $\beta = -.42$ ,  $p < .001$ ) information cues.

## V. Conclusion and Implications

Past literature on Internet shopping was limited to quantity of information cues and ignored quality of information cues presented online. This study employed a unique approach to explore consumer information processing online using perceived importance weight on information cues. This study adds valuable insights to the current limited literature on e-shopping by extending knowledge about the information needs and quality of information content. In addition, perceived importance of information cues varies among product category and also, can be predicted by consumer involvement.

Our findings indicated that selected information such size available, price, style, color description, item measurement, stock available, and item quality (in sequence) can be considered as global cues to judge product quality and influence purchase decision regardless of product category. E-tailers who supply a variety of merchandise online may consider and develop global standards of product information content that can be presented across apparel category.



Rather than providing excessive product information, information management and presentation on selected cues may be helpful to minimize cognitive effort on making purchase decisions in the risky purchase condition(e.g., Internet).

Perceived importance weight of style, measurement, and personalization for Jeans were greater than those for shirts, while perceived importance weight of information cues such as fiber content, fabric structure, and price for shirts were greater than jeans. Importance on other information cues such as item care, coordination, and country-of-origin was perceived similar in both apparel categories. This implies that e-tailers may emphasize some information that is specific to the product. For example, on the webpages that present shirts, fiber content, fabric structure, and price can be more clearly stated with easy language than other product information.

Results of this study indicated that consumer involvement predicted the perceived importance of information cues. Consumer who are more involved in apparel and perceived apparel to be more important than others are likely to perceive greater importance on fiber content and color information cues and less importance on fabric structure and price information cues for purchasing a pair of jeans. For shirts, people who had greater apparel involvement were likely to perceive greater importance on stock available information cue and less importance on size available and price information cues. Results imply that product information can be personalized based on consumer involvement. A short inventory of consumer involvement items can be assessed through the e-tailer website to identify consumer involvement. Individual customer response can be used to personalize the information and in turn, enhance information content on the website. For example, once the customer was identified as being highly involved, fiber content and color information can be enriched on his/her webpage.

Finally, e-tailers may consider product category (e.g., jean or shirt) and/or consumer trait such as involvement in order to create the best profile of product information presented online. Quality of information available could be considered more sig-

nificantly than quantity of information due to consumer economic information processing style and information literacy. Careful consumer research on information cues is important for e-tailers to find the most appropriate text information to reflect consumer selective information needs. For effective information management and presentation online, both product specific information and consumers' information need should be carefully understood.

This study focuses only two types of product categories, shirts and jeans. More research effort on extending product categories should be considered in future studies. In addition, this study was conducted with college student who may use internet aggressively for a shopping channel. The use of limited age cohort and gender may devalue generalization of the findings in this study. Furthermore, conjoint analysis would enable researchers to identify and select the best composition of information profile that can improve quality of information presentation online.

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## 요 약

본 연구의 주요주제는 온라인으로 제시되는 정보의 품질이다. 특히 제품의 태나 맞음새 등의 제품 품질이 불완전하게 평가될 수 밖에 없는 의류제품의 온라인 쇼핑의 경우 제시되는 제품의 정보가 구매결정에 매우 중요한 단서가 된다. 온라인 제품정보에 대한 선행연구가 주로 정보의 수량에 치우친 반면 본 연구에서는 중요성의 가중치로 제품정보의 품질을 알아보았다. 또한 이러한 과정에서 의류제품의 범주나 소비자들의 관여 정도가 미치는 영향을 알아보았다. 실증적 연구를 위하여 13가지의 정보가 선정되었고 복종의 영향을 알아보기 위해 청바지와 티셔츠를 판매하는 상황을 가정한 웹페이지가 설계되었다. 125명의 미국대학생들이 실험연구에 참여하였다. 연구결과 복종에 관계없이 중요한 기준들은 가중치 순서대로 사이즈, 가격, 스타일, 색상, 치수, 재고유무, 제품품질로 나타났다. 섬유조성, 직조방법, 개인화 등의 정보는 복종에 따라 중요도의 가중치가 다른 정보였다. 소비자의 의복관여는 복종에 따라 제품정보의 가중치에 다른 영향을 주었는데 티셔츠의 경우 고관여소비자는 재고유무정보에 보다 민감하며 재고유무와 사이즈 정보에는 덜 민감하였다. 청바지의 경우 고관여소비자는 섬유조성과 색상정보에 민감한 반면 직조방법이나 가격에는 상대적으로 덜 민감한 것으로 나타났다.